

ABSTRACT

A process for reducing the content of NO_x and N_2O in gases, in particular in process gases and offgases, which comprises the measures: a) addition of at least one nitrogen-containing reducing agent to the NO_x - and N_2O -containing gas in at least the amount required for complete reduction of the NO_x ; b) addition of a hydrocarbon, of carbon monoxide, of hydrogen, or of a mixture of one or more of these gases to the NO_x - and N_2O -containing gas for the reduction of the N_2O ; and c) introduction of the gas mixture into at least one reaction zone at temperatures of up to 450 °C, which contains one or more iron-laden zeolites. The process can be used, in particular, in nitric acid production, for offgases from power stations or for gas turbines.